



Coronavirus Disease 2019 (COVID-19)

Weekly Situation Report from the Robert Koch Institute

CALENDAR WEEK 16/2021 - CURRENT STATUS FOR GERMANY

Since 6 March 2021, the Robert Koch Institute (RKI) has been publishing the English version of the COVID-19 situation reports for Germany on a weekly basis. Information on the daily epidemiological situation is available on the RKI's online COVID-19 dashboard. In addition, the RKI's website provides daily situation reports in German, information on vaccination data and from the intensive care registry, as well as other regularly uploaded data. [Information sources as provided at the end of this report].

The following information is provided in this situation report: Overview on the epidemiological situation, demographic distribution of cases, surveys on laboratory tests of SARS-CoV-2 in Germany, and information from additional RKI-based surveillance systems.

– Changes since the last report are marked *blue* in the text –

The current epidemiological situation in Germany

As of **22 April 2021**

Confirmed cases		7-day incidence (7-di)		Vaccination monitoring	DIVI-Intensive care register
Total ¹	Active cases ²	Total population	No. of districts with 7-di > 50/100,000 pop	No. of vaccinations reported in last 24h	Change to previous day for no. of cases currently in ICU
+29,518 (3,217,710)	+8,000 [ca. 291,500]	161 cases/ 100,000 pop	- 1 [405/412]	1st vaccin. + 621,755 2nd vaccin. + 67,287	+62 [5,049]
Recovered ³	Deaths	60-79 years	80+ years	Total no. of people vaccinated with one/two vaccine dose/s and share of population	No. of deaths in ICU compared to the previous day
+21,200 (ca. 2,845,300)	+259 (80,893)	95 cases/ 100,000 pop	70 cases/ 100,000 pop	- 6 [345/412]	+111
				N1: 17,932,380 (21.6 %) N2: 5,724,561 (6.9 %)	

Note: DIVI = the German intensive and emergency care society. ICU= Intensive Care Unit

As of 22/04/2021, 3,217,710 laboratory-confirmed COVID-19 cases as well as 80,893 deaths associated with COVID-19 were shared with the RKI. The current national 7-day incidence is 161 cases per 100,000 population.

Since 26/12/2020, a total of 17,932,380 people in Germany have been vaccinated at least once (vaccination uptake 21.6%) and, of those, 5,724,561 people have been vaccinated twice against COVID-19 (vaccination uptake 6.9%).

On 22/04/2021 (12:15 PM), 5,049 patients with COVID-19 were in intensive care. +581 patients with COVID-19 were newly admitted. The resulting number of cases under treatment was +62 compared to the prior day. +111 patients with COVID-19 died in ICU since the previous day.

Geographical distribution of cases

Table 1 shows the number of laboratory-confirmed cases of COVID-19 reported to and validated by the RKI.

Table 1: Number and cumulative incidence (per 100,000 population) of laboratory-confirmed COVID-19 cases and deaths for each federal state electronically reported to RKI, Germany (22/04/2021, 12:00 AM). The number of new cases includes positive cases reported to the local health department on the same day as well as on previous days.

Federal State	Cumulative cases			Last 7 days		Cumulative deaths	
	Total number of cases	Number of new cases	Cases/100,000 pop.	Cases in the last 7 days	7-day incidence/100,000 pop.	Number of deaths	Number of deaths/100,000 pop.
Baden-Wuerttemberg	417,455	4,809	3,761	20,312	183	9,146	82
Bavaria	567,037	4,691	4,320	23,661	180	13,864	106
Berlin	161,643	1,168	4,405	4,911	134	3,168	86
Brandenburg	98,495	829	3,906	3,456	137	3,483	138
Bremen	24,013	219	3,525	1,100	161	443	65
Hamburg	69,140	401	3,743	2,005	109	1,442	78
Hesse	249,343	2,386	3,965	10,153	161	6,691	106
Mecklenburg-Western Pomerania	37,392	453	2,325	2,222	138	950	59
Lower Saxony	225,746	1,880	2,824	9,003	113	5,169	65
North Rhine-Westphalia	696,949	6,696	3,883	31,129	173	15,116	84
Rhineland-Palatinate	132,799	1,154	3,244	5,748	140	3,489	85
Saarland	35,633	489	3,611	1,505	152	946	96
Saxony	250,271	2,199	6,146	8,216	202	8,830	217
Saxony-Anhalt	85,175	720	3,881	3,573	163	2,978	136
Schleswig-Holstein	56,250	343	1,937	2,059	71	1,489	51
Thuringia	110,369	1,081	5,173	4,954	232	3,689	173
Total	3,217,710	29,518	3,869	134,007	161	80,893	97

Note: Quality checks and data cleaning by the health authorities and regional offices can lead to corrections to cases that were previously shared with RKI, such as retrospective detection of duplicate reports. This can occasionally lead to a slight reduction in the number of new cases.

Demographic distribution of cases

The age-specific 7-day incidence is shown using a heat map (Figure 1). Age-specific case numbers and age-specific 7-day incidences can be accessed through the following link: www.rki.de/covid-19-altersverteilung.

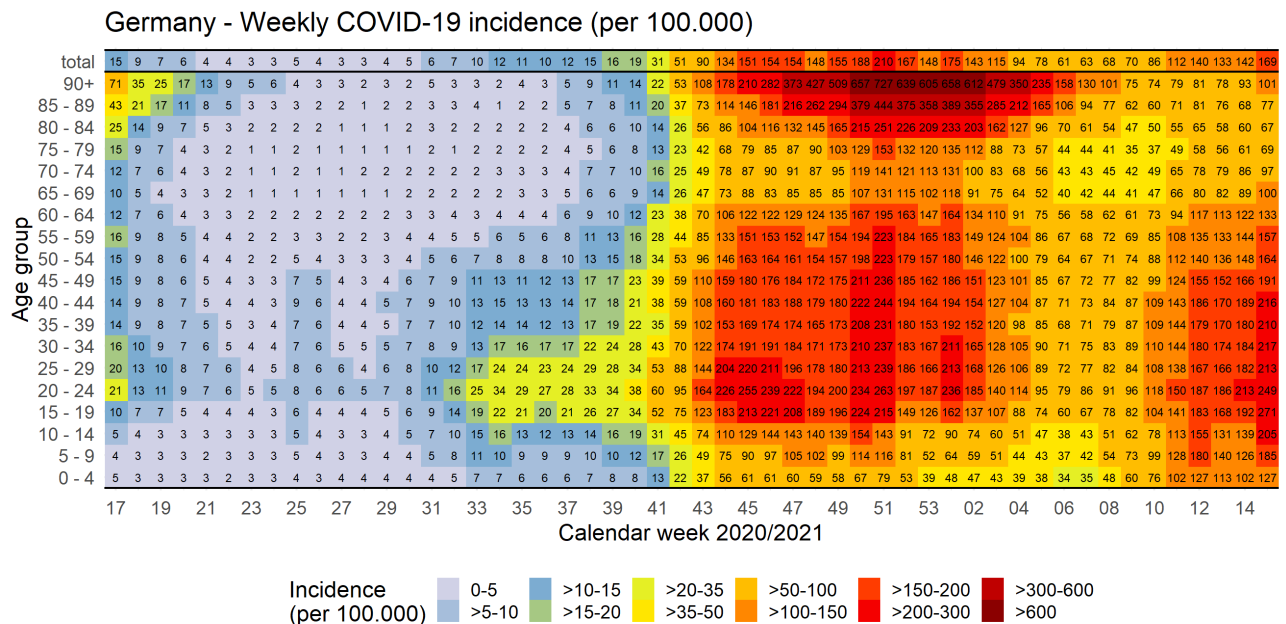


Figure 1: 7-day-incidence of reported COVID-19 cases by age group and reporting week (n=3,012,516 cases with respective data in the weeks 17 to 53, 2020, and weeks 01-15, 2021 (as of 20/04/2021, 12:00 AM). Data source: The mandatory surveillance system according to the German Data Protection Act.

Figure 2 shows the total number of cases with or without COVID-19-relevant symptoms as well as the proportion of hospitalised and deceased cases. Since deaths occur on average 2-3 weeks after infection, additional reports of deaths are expected for the most recent three weeks. The data used for this figure can be accessed through the following link: www.rki.de/covid-19-tabelle-klinische-aspekte.

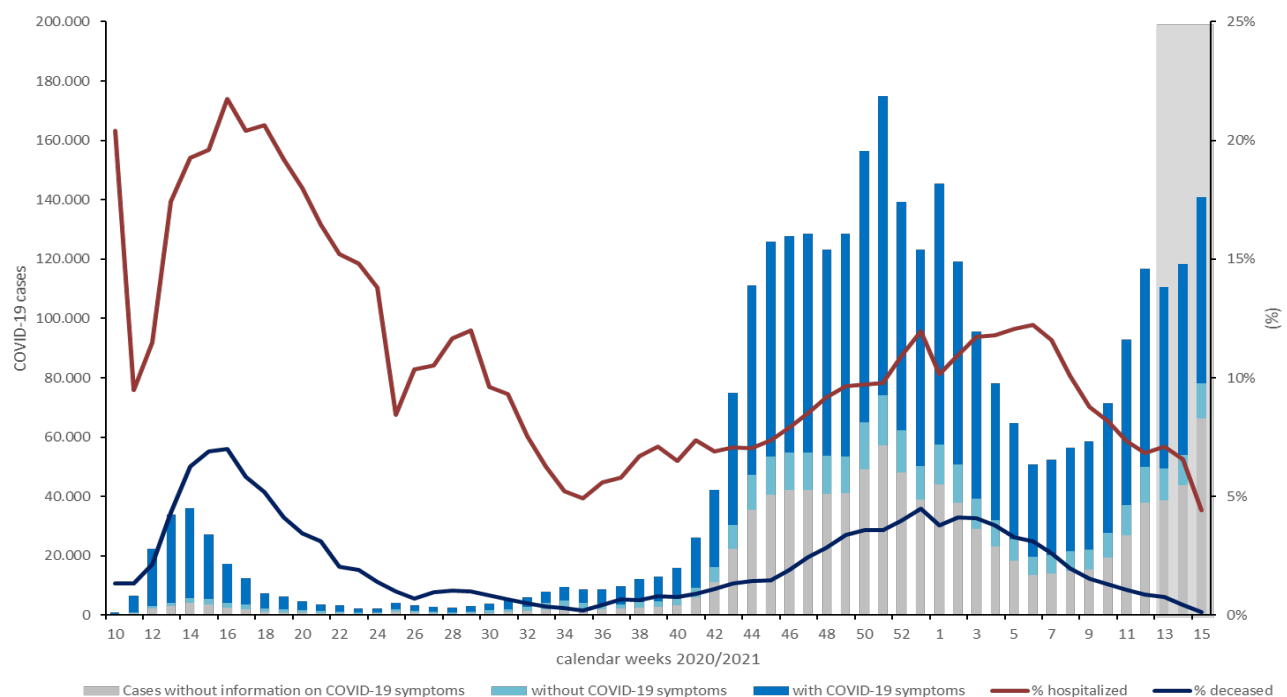


Figure 2: COVID-19 cases with or without COVID-19-relevant symptoms and the proportion of deceased and hospitalised cases for the weeks 10-53, 2020 and weeks 01-15, 2021 (20/04/2021, 12:00 AM). These numbers/proportions may change as a result of delays to reporting and data corrections. Data source: The mandatory surveillance system according to the German Data Protection Act.

Note: This report is a current snapshot and is updated on a weekly base.

Figure 3 shows the reported deaths associated with COVID-19 by calendar week according to the date of death. For recent weeks, further reports of deaths among reported cases can be expected.

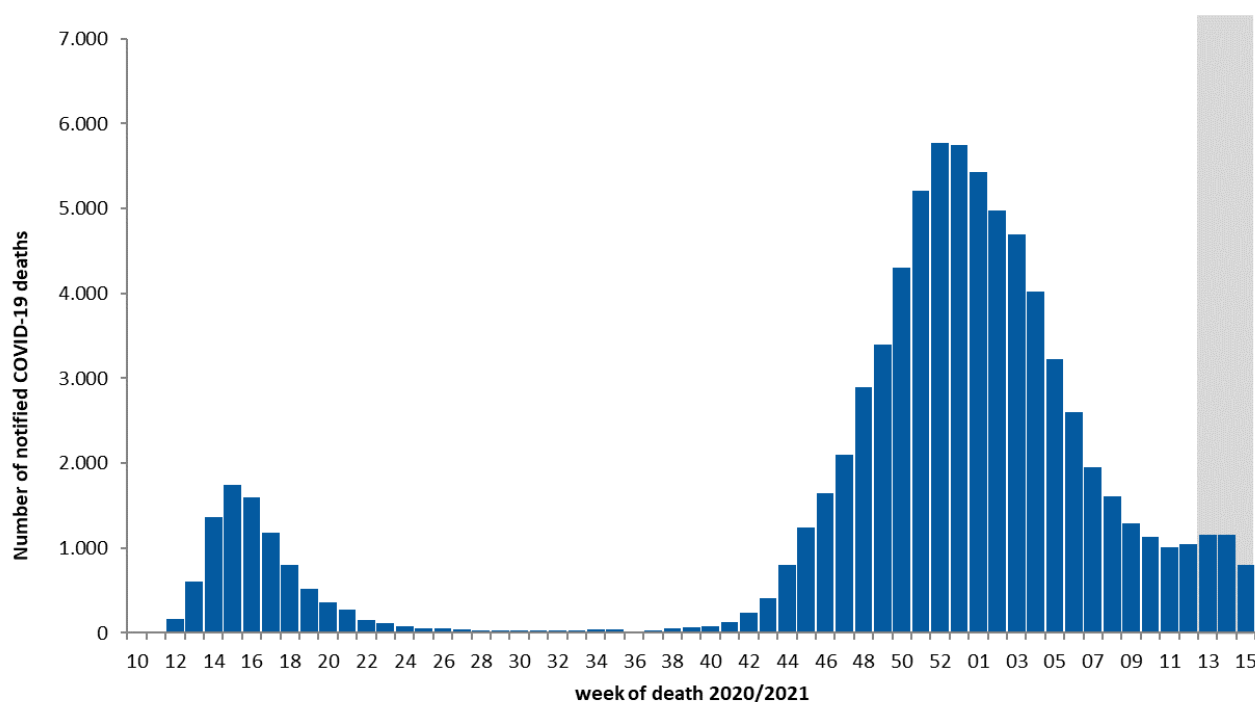


Figure 3: Number of reported deaths associated with COVID-19 according to week of death for the reporting weeks 10-53, 2020, and weeks 01-15, 2021 (20/04/2021, 12:00 AM). Further reports of deaths are expected for weeks 13-15/2021.

Information on SARS-CoV-2 laboratory tests in Germany

The RKI assesses the number of PCR tests for SARS-CoV-2 carried out in Germany on a weekly basis by merging data from university hospitals, research institutions as well as clinical and outpatient laboratories throughout Germany. These data are shared voluntarily with the RKI from the following sources: An internet-based RKI test laboratory survey, the network for respiratory viruses (RespVir), the laboratory-based SARS-CoV-2 surveillance established at the RKI (an extension of the Antibiotic Resistance Surveillance (ARS)), and the enquiry of a professional association of laboratory medicine.

Table 2 shows the number of tests, the proportion of positive tests, as well as the number of reporting laboratories since the start of testing in Germany. Since laboratories can register and correct the tests from previous calendar weeks at a later date, it is possible that the ascertained numbers can change retrospectively. It should be noted that the number of tests is not the same as the number of people tested, since the data may include multiple tests from the same individuals within a time period of a few weeks (Table 2). Complete data since the beginning of testing are available through the following link: <http://www.rki.de/covid-19-testzahlen> (in German). The current testing criteria can be found through the following link: www.rki.de/covid-19-testkriterien (in German).

Table 2: Number of SARS-CoV-2-laboratory tests carried out in Germany (as of 20/04/2021 12:00 PM)

Calendar week	Number of tests	Positive tests	Proportion positive (%)	Number of reporting laboratories
Up to & incl, week calendar week 5/2021	41,870,521	2,484,761		
6/2021	1,060,602	67,882	6.40	213
7/2021	1,103,231	67,379	6.11	207
8/2021	1,171,798	72,059	6.15	210
9/2021	1,153,270	71,715	6.22	211
10/2021	1,280,050	85,655	6.69	215
11/2021	1,367,247	107,827	7.89	209
12/2021	1,415,220	131,857	9.32	206
13/2021	1,178,378	128,814	10.93	207
14/2021	1,165,380	140,491	12.06	206
15/2021	1,295,635	160,735	12.41	202
Total	54,061,332	3,519,175		

Information from additional RKI-based surveillance systems on acute respiratory illnesses

GrippeWeb ("FluWeb") is a platform at RKI for monitoring the activity of acute respiratory illness (ARI) within the population in Germany. In **week 15, 2021**, the total ARI rate remained stable. **The ARI rate increased in the age groups 0 to 4 years and 15 to 34 years, but remained stable or decreased in all other age groups.** Since week 36, 2020, the total ARI rate has been lower than in seasons 2017/18 and 2018/19 and is now similar to values seen during 2019/20. Further information can be found through the following link: <https://grippeweb.rki.de/>.

The Influenza Working Group (AGI) monitors ARI through a sentinel primary care network. In **week 15, 2021**, the total number of patient visits (consultations) due to ARI (ARI consultation rate) **increased slightly**. The ARI consultation rate **increased for age groups below 60 years**. The total ARI consultation rate **was slightly higher compared to the values seen in 2020, but still lower compared to previous years**. Through virological surveillance of the AGI, respiratory viruses were detected in **63 of 145 sentinel samples (43%)** in **week 15, 2021**. Among those, human seasonal coronavirus (hCoV) was identified in **31 (21%) samples**, rhinovirus in **24 (17%) samples**, SARS-CoV-2 in **ten (7%) samples**, Parainfluenzavirus in **three (2%) samples** and Metapneumonvirus was found in **one sample (1%)**. Further national and regional information can be found through the following links: <https://influenza.rki.de/> and <https://influenza.rki.de/Diagrams.aspx?agiRegion=0>.

A third ICD-10 code-based system monitors severe acute respiratory illness (SARI) in hospitalised patients (ICD-10 codes J09 to J22: primary diagnoses of influenza, pneumonia or other acute infections of the lower respiratory tract). The total number of SARI cases **increased** in week 14, 2021. **The number of SARI cases increased substantially in the age group 35 to 59 years. In this age group, such high SARI case numbers were seen only once before during the unusually severe influenza season 2017/18.** Of all reported SARI cases in week 14, 2021, **66%** were diagnosed with COVID-19 (ICD-10 code U07.1!) (Figure 4). Please note that due to data availability, only patients with an ICD-10 Code for SARI as the main diagnosis and hospitalisation duration of up to one week were included in this analysis.

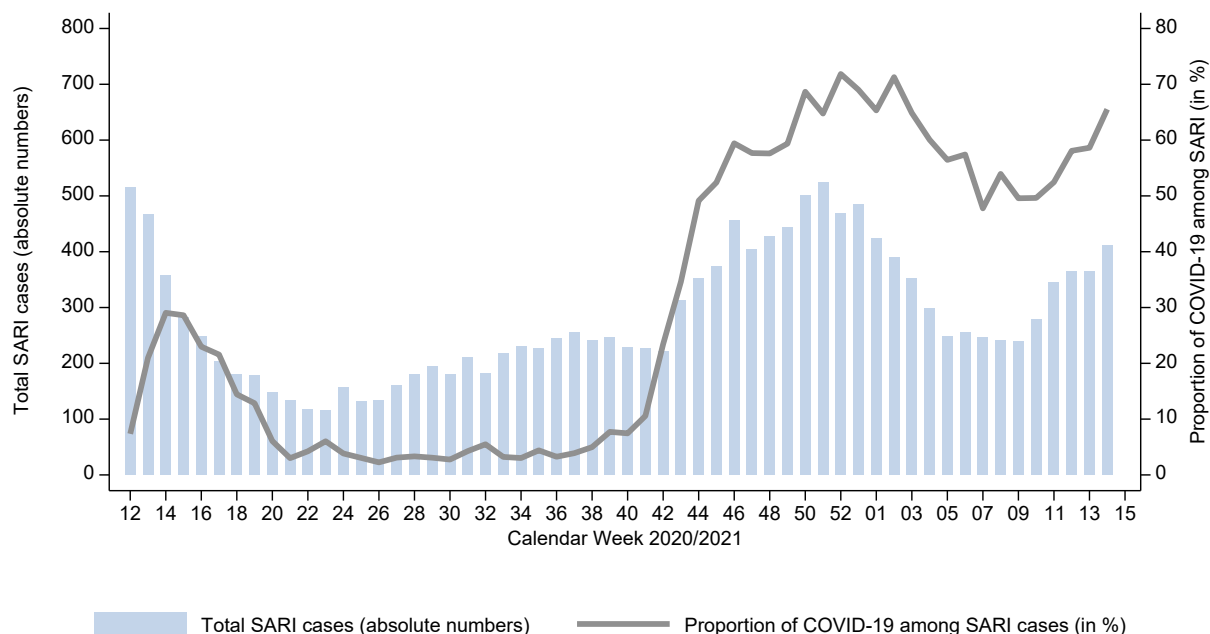


Figure 4: Weekly number of SARI cases (ICD-10 codes J09-J22) and proportion of cases with a diagnosis of COVID-19 (ICD-10 code U07.1!) among SARI cases with duration of hospitalisation of up to one week and with date of admission in weeks 12, 2020 to 14, 2021. Data are derived from 71 sentinel hospitals.

Risk Assessment by the RKI

In view of persistently high case numbers of COVID-19 and the increase in 7-day incidence, the RKI assesses the threat to the health of the general population in Germany to be **very high**. It highlights the ongoing community transmission of SARS-CoV-2 as well as the occurrence of many outbreaks, particularly in households, day-care facilities for children and increasingly in schools, as well as in occupational settings.

In light of the increase in variants of concern (VOC), which have higher infectiousness, a rigorous reduction of physical contacts, use of protective measures, as well as intensive efforts to contain outbreaks and chains of infections are necessary to reduce the number of new infections and to protect people who are vulnerable.

On 21/04/2021, the risk assessment was updated with reference to the new SARS-CoV-2 variants. The current version can be found through the following link: <http://www.rki.de/covid-19-risikobewertung> (in German).

Measures taken in Germany

- As of 21 April 2021, the risk assessment in Germany changed:
<http://www.rki.de/covid-19-risikobewertung> (07/04/2021, *in German*)
- As of 20 April 2021, information about seroepidemiological studies in Germany changed:
www.rki.de/covid-19-serostudies-germany (20/04/2021)
- As of 19 April 2021, the epidemiological profile of SARS-CoV-2 und COVID-19 changed:
<http://www.rki.de/covid-19-steckbrief> (19/04/2021, *in German*)
- The recommendation for contact management in Germany:
www.rki.de/covid-19-kontaktpersonen (16/04/2021, *in German*)
- Information on the designation of international risk areas:
<http://www.rki.de/covid-19-risikogebiete>
- Entry restrictions to Germany for travelers from countries designated as regions with variants:
https://www.rki.de/DE/Content/InfAZ/N/Neuartiges_Coronavirus/Transport/CoronaSchV_Mutationen.pdf? (30/01/2021; *in German*)
- German electronic Sequencing-Data-Hub (DESH, Deutscher elektronischer Sequenzdaten-Hub, *in German*): www.rki.de/covid-19-desh
- Recommendations on COVID-19-vaccination: www.rki.de/covid-19-impfempfehlung (*in German*)
- Government decisions regarding additional containment measures:
<https://www.bundesregierung.de/breg-de/themen/coronavirus/mpk-beschluss-corona-1834364> (*in German*)
- National Test Strategy for SARS-CoV-2 in Germany: www.rki.de/covid-19-teststrategie (*in German*)
- Important information and guidance on SARS-CoV-2 for returning travellers: www.rki.de/covid-19-reisende (*in German*)
- Selected and regularly updated information on COVID-19: <https://www.rki.de/covid-19-en>
- Publication from the Ministry of Health in Germany on all measures implemented in Germany since 27/01/2020 : <https://www.bundesgesundheitsministerium.de/coronavirus/chronik-coronavirus.html> (*in German*)
- Information from the Ministry of Health in Germany for travellers entering Germany: Frequently asked questions and answers : <https://www.bundesgesundheitsministerium.de/coronavirus-infos-reisende/faq-tests-einreisende.html> (*in German*)
- Corona-Warn-App, the national contact tracing app: www.rki.de/covid-19-warnapp-en
- Information on regional control measure regulations such as physical distancing and quarantine for people returning from other countries:
<https://www.bundesregierung.de/breg-de/themen/coronavirus/corona-bundeslaender-1745198> (*in German*)

Further information sources

- Information on COVID-19 provided the German government in multiple languages (Arabic, Dari, English, Farsi, French, Russian, Turkish): <https://www.bundesregierung.de/breg-de/themen/coronavirus/coronavirus-covid>
- COVID-19-Dashboard: <https://corona.rki.de/>
- Miscellaneous data tables:
 - Case numbers: www.rki.de/covid-19-fallzahlen
 - Age distribution: www.rki.de/covid-19-altersverteilung
 - Clinical aspects: www.rki.de/covid-19-tabelle-klinische-aspekte
 - Number of cases linked to outbreaks: www.rki.de/covid-19-ausbruchsdaten
 - Nowcasting: www.rki.de/covid-19-nowcasting
- Situation reports on COVID-19 for Germany: www.rki.de/covid-19-situationsbericht
- Information on vaccinations in Germany:
 - <http://www.rki.de/covid-19-impfquoten>
 - <https://impfdashboard.de/>
- Intensive care registry: <https://www.intensivregister.de>
- Report on SARS-CoV-2 variants in Germany, particularly VOC B.1.1.7 _ www.rki.de/covid-19-voc-berichte

Annex

- ¹ The difference to the previous day is based on the date that cases are received by the RKI. Due to delays in data sharing, cases from previous days may be included in today's numbers.
- ² Active cases were calculated from the number of shared cases minus deaths and the estimated number of recovered cases.
- ³ The algorithm for estimating recovered cases takes into account information on disease onset and hospitalisation, but does not do so for late effects since these data are not recorded regularly.